Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code01 Yield Protection02 Revenue Protection03 Revenue Protection with Harvest Price ExclusionCommodity Code0011 Wheat0021 Cotton0078 Sunflower0015 Canola0041 Corn0081 Soybeans0018 Rice0051 Grain Sorghum0091 Barley

0018 Rice	0051 Grain Sorghum 0091 Barley						
	<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>		
<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	Rounding	<u>Rules</u>	
Section 1: Liability Calculation							
Premium Guarantee Per Acre Amount = Approved Yield * Coverage Level Percent	Premium Guarantee Per Acre Amount	Internal		999999999.99	If Unit of Measure equals Pounds "LBS", then round to whole number. If Unit of Measure equals Tons "TONS", then round to 2 decimals. Otherwise, round to 1 decimal.		
	Approved Yield	P11	47	99999999.99	None		
	Coverage Level Percent	P14	33	9.9999	None		
When Guarantee Adjustment Type Code equals Late Planting, "L" OR Prevented Planting, "P": Guarantee Per Acre Amount * Guarantee Per Acre Amount * Guarantee Adjustment Factor	Guarantee Per Acre Amount	Internal		9999999999999	If Unit of Measure equals Pounds "LBS", then round to whole number. If Unit of Measure equals Tons "TONS", then round to 2 decimals. Otherwise, round to 1 decimals.		
	Guarantee Adjustment Factor	P11	75	0.999	None	Edit with the Guarantee Adjustment ICE, "D00068".	

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Exhibit Name: Premium Calculation

Exhibit Number: P11-1, Plan 01, 02, 03

Record Name: Acreage

Record Code: P11

Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion		
	0011 Wheat	0021 Cotton	0078 Sunflower			
Commodity Code	0015 Canola	0041 Corn	0081 Soybeans			
	0018 Rice	0051 Grain Sorghum	0091 Barley			
		<u>Field</u>	Record Field Field	<u>Field</u>		

0018 Rice	0051 Grain Sorghum			0091 Barley		
	<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
Drice Election Amount - Projected Drice * Drice Election Descent	Price Election Amount	Internal		9999.9999	When Commodity Code equals 0015, 0018, 0078, 0116, 0255, 0257; Or 0043, 0047, 0049 with Reinsurance Year greater than or equal to "2001"; Or 0038, 0075 with Reinsurance Year greater than or equal to "2002"; then round to 4 decimals. Otherwise, round to 2 decimals.	Rounding rules can be validated with ARM, Price Calculation Factor, "A00
Price Election Amount = Projected Price * Price Election Percent	Projected Price	ADM		99999.9999	INONE	Liability for Yield Protection, "01" allows the producer the opportunity to choose a percentage of the Projected Price. Liability for Revenue Protection, "02", or Revenue Protection with Harvest Price Exclusion, "03", requires the producer to choose 100 percent of the Projected Price. Edit with ADM Price, "00810".
	Price Election Percent	ICE		9.9999	None	Price Election Percent must equal 1.000, when Insurance Plan Code is Revenue Protection, "02", or Revenue Protection with Harvest Price Exclusion, "03". Edit with ICE Price Election Percent, "D00007".
Promium Total Guarantee Promium Guarantee Per Acre Amount * Price Flection	Premium Total Guarantee Amount	Internal		99999999.99	Round to 2 decimals.	
Premium Total Guarantee = Premium Guarantee Per Acre Amount * Price Election Amount * Reported Acreage	Price Election Amount	Internal		9999.9999	None	
Amount Amount * Reported Acreage	Reported Acreage	P11	52	99999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage.

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Prior Year Rate Multiplier

Prior Year Exponent Value

Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

9999.99999999

S99.999

Round to 8 decimals.

None

Edit with ADM Base Rate, "A01010".

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with F	larvest Price Exclusion
	0011 Wheat	0021 Cotton			0078 Sunflower		
Commodity Code	0015 Canola	0041 Corn			0081 Soybeans		
	0018 Rice	0051 Grain Sorghum			0091 Barley		
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
	<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
		Total Guarantee Amount	P11	96	99999999.99	Round to 2 decimals.	
Total Guarantee Amount :	Guarantee Per Acre Amount * Price Election Amount *	Price Election Amount	Internal		9999.9999	None	
Total Guarantee Amount	Reported Acreage	Reported Acreage	P11	52	999999.99	None	Reported Acreage must equal the sum of all Land, P27,
				32	333333.33		Reported Acreage.
Premium Liability Amount =	Premium Total Guarantee Amount * Insured Share	Premium Liability Amount	Internal		999999999	Round to whole number.	
Tremium Elability / imount	Percent	Insured Share Percent	P11	48	9.9999	None	
		Liability Amount	P11	87	999999999	Round to whole number.	
Liability Amount =	= Total Guarantee Amount * Insured Share Percent	Insured Share Percent	P11	48	9.9999	None	
Section 2: Base Premium Ra	ate Calculation						
		Current Year Yield Ratio	Internal		9.9999	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
Current Year Yield Ratio =	= Rate Yield / Reference Amount	Rate Yield	P15	38	99999999.99	None	
		Reference Yield	ADM		99999.99	None	Edit with ADM Base Rate, "A01010".
		Prior Year Yield Ratio	Internal		9.9999	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
Prior Year Yield Ratio =	= Rate Yield / Prior Year Reference Amount	Rate Yield	P15	38	99999999.99	None	
		Prior Year Reference Amount	ADM		99999.99	None	Edit with ADM Base Rate, "A01010".
Current Year Rate	= Current Year Yield Ratio ^ Exponent Value	Current Year Rate Multiplier	Internal		9999.9999999	Round to 8 decimals.	
Multiplier	Carrent real field flatio Exponent value	Exponent Value	ADM		S99.999	None	Edit with ADM Base Rate, "A01010".

Internal

ADM

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Prior Year Rate Multiplier = Prior Year Yield Ratio ^ Prior Year Exponent Value

Record Code: P11

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	Release Date: 6/30/2010								
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with H	Harvest Price Exclusion		
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0078 Sunflower 0041 Corn 0081 Soybeans 0051 Grain Sorghum 0091 Barley							
	<u>Calculations</u>	<u>Field</u> Name	Record Number	<u>Field</u> Number	<u>Field</u> Format	<u>Field</u> Rounding	<u>Rules</u>		
	When Rate Method Code is Fixed, "F":	Current Year Base Rate	Internal		9999999999999999	Round to 8 decimals.			
=	Sub County Rate	Sub County Rate	ADM		99.9999	None	Edit with ADM Sub County Rate, "A01050".		
=	When Rate Method Code is Additive, "A": Sub County Rate + (Current Year Rate Multiplier * Reference Rate + Fixed Rate)	Current Year Rate Multiplier	Internal		9999.99999999	None			
Current Year Base Rate	When Rate Method Code is Multiplicative, "M": Sub County Rate * (Current Year Rate Multiplier * Reference Rate + Fixed Rate)	Reference Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".		
=	Otherwise: Current Year Rate Multiplier * Reference Rate + Fixed rate	Fixed Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".		
	When Rate Method Code is Fixed, "F":	Prior Year Base Rate	Internal		9999999999999999	Round to 8 decimals.			
=	= Sub County Rate	Sub County Rate	ADM		99.9999	None	Edit with ADM Sub County Rate, "A01050".		
	When Rate Method Code is Additive, "A":								
=	Sub County Rate + (Prior Year Rate Multiplier * Prior Year Reference Rate + Prior Year Fixed Rate)	Prior Year Rate Multiplier	Internal		9999.99999999	None			
Prior Year Base Rate	When Rate Method Code is Multiplicative, "M":								
-	Sub County Rate * (Prior Year Rate Multiplier * Prior Year Reference Rate + Prior Year Fixed Rate)	Prior Year Reference Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".		
=	Otherwise: Prior Year Rate Multiplier * Prior Year Reference Rate + Prior Year Fixed rate	Prior Year Fixed Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".		

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	(03 Revenue Protection with Harvest Price Exclusion
	0011 Wheat	0021 Cotton	0078 Sunflower	
Commodity Code	0015 Canola	0041 Corn	0081 Soybeans	
	0018 Rice	0051 Grain Sorghum	0091 Barley	

	0018 Rice	0051 Grain Sorghum			0091 Barley		
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>
	When Unit Structure Code is equal to Optional Unit, 'OU' or Basic Unit, "BU":	Current Year Base Premium Rate	Internal		9999999999999999	Round to 8 decimals.	
=		Rate Differential Factor	ADM		9.99999999	None	Edit with ADM Coverage Level Differential, "A01040".
	Current Year Base Rate * Rate Differential Factor * Unit Residual Factor	Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040".
Current Year Base	When Unit Structure code is Enterprise Unit, 'EU':						
Premium Rate =	Current Year Base Rate * Rate Differential Factor * Enterprise Unit Residual Factor	Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040".
	When Unit Structure code is Whole Farm Unit, "WU":						
=	Current Year Base Rate * Rate Differential Factor * Whole Farm Unit Residual Factor	Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040".
	When Unit Structure Code is equal to Optional Unit, 'OU' or Basic Unit, "BU":	Prior Year Base Premium Rate	Internal		99999999999999999	Round to 8 decimals.	
=		Prior Year Rate Differential Factor	ADM		9.99999999	None	Edit with ADM Coverage Level Differential, "A01040".
	Prior Year Base Rate * Prior Year Rate Differential Factor * Prior Year Unit Residual Factor	Prior Year Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040".
Prior Year Base Premium = Rate	When Unit Structure code is Enterprise Unit, "EU": Prior Year Base Rate * Prior Year Rate Differential Factor * Prior Year Enterprise Unit Residual Factor	Prior Year Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040".
=	When Unit Structure code is Whole Farm Unit, 'WU': Prior Year Base Rate * Prior Year Rate Differential Factor * Prior Year Whole Farm Unit Residual Factor	Prior Year Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040".

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Record Name: Acreage

Reinsurance Year: 2011

Version: Approved
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Record Code: P11 Release Date: 6/30/2010							
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection wit	th Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice Calculations	0021 Cotton 0041 Corn 0051 Grain Sorghum Field Name	Record Number	<u>Field</u>	0078 Sunflower 0081 Soybeans 0091 Barley <u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	Rules
Base Premium Rate =	MIN (Current Year Base Premium Rate, Prior Year Base Premium Rate * 1.2, .999)	Base Premium Rate	P11	90	999999999999999999999999999999999999999	Round to 8 decimals.	
Revenue Lookup Rate =	MIN(Current Year Base Rate, Prior Year Base Rate * 1.2, 0.9999)	Revenue Lookup Rate	Internal		9999999999.9999	Round to 4 decimals.	
Base Rate =	MIN(Current Year Base Rate, Prior Year Base Rate * 1.2, 0.999)	Base Rate	Internal		999.99999999	Round to 8 decimals.	
ection 3: Unit Discount Cal	culation	For all Combo Commodities, if the chosen Unit Structur is Optional Units, the appropriate discount factor shoul be looked up and applied.					
/hen Commodity Code is N	OT EQUAL to Wheat, "0011", Cotton, "0021", Corn, "00	41", or Soybeans, "0081".					
=	When the Unit Structure Code is Optional Unit, "OU": 1.0	Unit Structure Discount Factor	Internal		9.99999999	Round to 8 decimals.	
=	When Unit Structure Code is Basic Unit, "BU": Basic Unit Discount Factor	Basic Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090".
Unit Structure Discount Factor	When the Unit Structure Code is Enterprise Unit, "EU": Basic Unit Discount Factor * Enterprise Unit Discount Factor	Enterprise Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090". Enterprise Units will now mandate that all insured acreage for a commodity will be included in the Enterprise Unit. This includes both fall and spring planted acreage. Enterprise Unit Discount Factor is contingent upon the sum of the reported acres which were not prevented from planting for all applicable units being Greater Tha the Area Low Quantity and less than Area High Quantit fields contained on the ADM Unit Discount, "A01090".

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Record Name: Acreage

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	Record Code: P11				Release Date: 6/30/2010					
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with F	Harvest Price Exclusion			
Commodity Code	0015 Canola	0021 Cotton 0041 Corn 0051 Grain Sorghum			0078 Sunflower 0081 Soybeans 0091 Barley					
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>			
When Commodity Code is EQUAL to Wheat, "0011", Cotton, "0021", Corn, "0041", or Soybeans, "0081".										
Total Liability Amount =	Premium Liability Amount for all records within the	Total Liability Amount	Internal		999999999	Round to whole number.				
	Insured unit for the Commodity	Premium Liability Amount	Internal		999999999	None				
Proportion Liability Type = Amount	\sum Premium Liability Amount by Type within the Insured Unit / Total Liability Amount	Proportion Liability Type Amount	Internal		999999.99999999	Round to 8 decimals.				
Proportion Liability = Practice Amount	∑ Premium Liability Amount by Practice within the Insured Unit / Total Liability Amount	Proportion Liability Practice Amount	Internal		999999.99999999	Round to 8 decimals.				
Proportion Liability Unit = Amount	Premium Liability Amount by Record / Total Liability Amount	Proportion Liability Unit Amount	Internal		999999.9999999	Round to 8 decimals.				
		Average Raw Rate	Internal		99999999.9999999	Round to 8 decimals.				
	number of units	Reference Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".			
Average Raw Rate =	$\sum_{i=1}^{\infty} (\text{Reference Rate}_i + \text{Fixed Rate}_i)$ $* \text{ Proportion Liability Unit}$ $Amount_i$	Fixed Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".			
		Average Base Rate	Internal		99999999.9999999	Round to 8 decimals.				
Average Base Rate =	number of units $\sum_{i=1}^{\text{number of units}} (\text{Base Rate}_i) * \text{Proportion Liability Unit}$ Amount_i	Base Rate	ADM		999999999999999999999999999999999999999	None	Edit with ADM Combo Revenue Factor, "A01030".			
		Average Base Premium Rate	Internal		99999999.9999999	Round to 8 decimals.				
Average Base Premium Rate	number of units $ \sum_{i=1}^{r} (Base \ Premium \ Rate_i) $ $ * \ Proportion \ Liability \ Unit \ Amount_i $	Base Premium Rate	P11	90	999999.99999999	None				

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Prof	tection with Harvest Price Exclusion
	0011 Wheat	0021 Cotton	0078 Sunflower	
Commodity Code	0015 Canola	0041 Corn	0081 Soybeans	
	0018 Rice	0051 Grain Sorghum	0091 Barley	
		Field	Record Field Field Fiel	d

0019 VICE	0031 Grain Sorgitum			0051 Bailey		
	<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
	Predicted Value Quantity	Internal		999999.99999999	Round to 8 decimals.	
Intercept Coefficient + Total Reported Acreage * Total Unit Size Coefficient + Average Raw Rate * Average County Base Rate Coefficient + redicted Value Quantity = $\sum Proportion\ Liability\ Type\ Amount_i\ *\ Type\ Coefficient_i$	Intercept Coefficient	ADM		S9.9999	None	When pulling the Intercept Coefficient, Total Unit Size Coefficient, Average County Base Rate Coefficient, and Standard Deviation Quantity, the values should be the same for a given commodity and coverage level percent although they may have different Unit Id's. The reason for the different Unit Id's is to account for the Type Coefficients and Practice Coefficients which will vary by the type and practice in each unit and coverage level percent.
+ $\sum \text{Proportion Liability Practice Amount}_i \cdot \text{Practice}$ Coefficient_i	Total Reported Acreage	ADM		9.9999999	None	Edit with ADM Unit Discount, "A01090". Total Reported Acreage refer to the sum of the Reported Acreage which were not prevented from Planting for the unit.
	Average Raw Rate * Average County Base Rate Coefficient	ADM		99.9999	None	Edit with ADM Unit Discount, "A01090".
	Proportion Liability Type * Type Coefficient	ADM		9.9999	None	Edit with ADM Unit Discount, "A01090".
	Proportion Liability Practice * Practice Coefficient	ADM		9.9999	None	Edit with ADM Unit Discount, "A01090".

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

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Insurance Plan Code	01 Yield Protection	02 Revenue Protection	02 Revenue Protection			03 Revenue Protection with H	arvest Price Exclusion
	0011 Wheat	0021 Cotton			0078 Sunflower		
Commodity Code	0015 Canola	0041 Corn			0081 Soybeans		
	0018 Rice	0051 Grain Sorghum			0091 Barley		
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	

<u>Commodity Code</u>	0015 Canoia	0041 Corn			0081 Soybeans		
	0018 Rice	0051 Grain Sorghum		-	0091 Barley		
		<u>Field</u>	<u>Record</u>	<u>Field</u>	<u>Field</u>	<u>Field</u>	
	Calculations	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
	IF (Predicted Value Quantity / Standard Deviation Quantity) < 0: 0.39894228 * EXP(-(Predicted Value/ Standard	CDF	Internal		999999.99999999	Round to 8 decimals.	
Cumulative Distribution Function (CDF)	Deviation Quantity) ² /2) x [0.31938153 * (1/ (1-0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) – 0.356563782 * (1/ (1-0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) ² + 1.781477937 * (1/ (1-0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) ³ – 1.821255978 * (1/ (1-0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) ⁴ + 1.330274429 * (1/ (1-0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) ⁵]	Standard Deviation Quantity	ADM		999.99999999	None	Edit with ADM Unit Discount, "A01090".
	IF (Predicted Value Quantity / Standard Deviation Quantity) ≥ 0: 1 - 0.39894228 * EXP(-(Predicted Value Quantity / (2))	CDF	Internal		999999.99999999	Round to 8 decimals.	
Cumulative Distribution Function (CDF)	Standard Deviation Quantity) ² /2) x [0.31938153 * (1/ (1+0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) – 0.356563782 * (1/ (1+0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) ² + 1.781477937 * (1/ (1+0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) ³ – 1.821255978 * (1/ (1+0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) ⁴ + 1.330274429 * (1/ (1+0.2316419 * (Predicted Value Quantity/ Standard Deviation Quantity))) ⁵]	Standard Deviation Quantity	ADM		999.999999999	None	Edit with ADM Unit Discount, "A01090".
Probability Distribution	0.39894228 * EXP(-(Predicted Value Quantity/	PDF	Internal		999999.99999999	Round to 8 decimals.	
Function (PDF)	Standard Deviation Quantity) ² /2)	Standard Deviation Quantity	ADM		999.99999999	None	Edit with ADM Unit Discount, "A01090".

Record Name: Acreage

Reinsurance Year: 2011

Version: Approved
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		Record Code: P11 Release Date: 6/30/2010					
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection wi	th Harvest Price Exclusion
	0011 Wheat	0021 Cotton			0078 Sunflower		
Commodity Code	0015 Canola	0041 Corn 0081 Soybeans					
	0018 Rice	0051 Grain Sorghum	T		0091 Barley		
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>
Expected Normalized LCR	Predicted Value Quantity * CDF + Standard Deviation Quantity * PDF	Expected Normalized LCR Difference	Internal		999999999999999999999999999999999999999	Round to 8 decimals.	
Billerende	Quantity 1 Di	Standard Deviation Quantity	ADM		999.99999999	None	Edit with ADM Unit Discount, "A01090".
Yield Protection LCR Difference Quantity	Average Base Rate * Expected Normalized LCR Difference	Yield Protection LCR	Internal		999999.99999999	Round to 8 decimals.	
Unit Structure Discount Factor	MAX [0.60,(Average Base Premium Rate - = Yield Protection LCR Difference Quantity) / Average Base Premium Rate]	Unit Structure Discount Factor	Internal		9.99999999	Round to 8 decimals.	
Section 4: Optional Covera	ge						The Biotech Endorsement (BE) will be treatede as a normal option and it's rate will be applied in this section. In the legacy system the Biotech Endorsement was applied separately with it's own field premium discount factor. This will no longer be the case.
		Additive Optional Rate Adjustment Factor	Internal		999999.9999	Round to 4 decimals.	
Additive Optional Rate Adjustment Factor	When Rate Method Code is Additive, "A": = ∑ Option Rate * Rate Differential Factor	Option Rate	ADM		99999.9999	None	Option Rate will be the Sum of all Option Rate with Rate Method Code equal to Additive, "A". Edit with ADM Option Rate, "A01060".
		Rate Differential Factor	ADM		9.99999999	None	Edit with ADM Coverage Level Differential, "A01040".
	When Rate Method Code is Multiplicative, "M":	Multiplicative Optional Rate Adjustment Factor	Internal		999999.9999	Round to 4 decimals.	
Multiplicative Optional Rate Adjustment Factor	= \sum Option Rate1 * Option Rate2 * Option Rate3	Adjustment Factor					

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Reinsurance Year: 2011

	Record Name: Acr								
	Record Code	•			Release Date:				
						· ·			
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection wit	th Harvest Price Exclusion		
	0011 Wheat	0021 Cotton			0078 Sunflower				
Commodity Code	0015 Canola	0041 Corn			0081 Soybeans				
	0018 Rice	0051 Grain Sorghum							
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>			
	<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>		
Section 5: Revenue Cover	age Add on Rates						It is recommended that other than hard coding for specific type and practice codes which will eventually change when the new key structure is adopted, that a condition be put in place that will set the add on rate t 0 when the Price Volatility is 0. This condition MUST occur at some point in order to circumvent the Calculation of Preliminary Revenue Protection Add on Rate and Preliminary Revenue Protection with Harvest Price Exclusion Add on Rate, which contains a constraint that the add on rate be at least 1% greater than the base Premium Rate.		
		Adjusted Mean Quantity (AdjMean)	Internal		999999.99999999	Round to 8 decimals.			
		Approved Yield (AY)	P11	47	99999999.99	None			
Adjusted Mean Quantity	r = Approved Yield * Mean Quantity / 100						Edit with ADM Combo Revenue Factor, "A01030".		
		Mean Quantity	ADM		999.999999999	None	Search the Combo Revenue Factor, "A01030" for the Mean Quantity, When the Revenue Lookup Rate = Base Rate		
		Adjusted Standard Deviation Quantity (AdjStndDev)	Internal		999999999999999999999999999999999999999	Round to 8 decimals.			
		Approved Yield (AY)	P11	47	99999999.99	None			
Adjusted Standard Deviation Quantity	= Approved Yield * Standard Deviation Quantity / 100	Standard Deviation Quantity		999.99999999	None	Edit with ADM Combo Revenue Factor, "A01030". Search the Combo Revenue Factor "A01030" for the Standard Deviation Quantity, When the Revenue Looku Rate = Base Rate			
1.32	Lal/Daine Malakilika Fastan (A.S. 4.)	Log Variance Quantity (LnVar)	Internal		999999.99999999	Round to 8 decimals.			
LnVar	r = Ln((Price Volatility Factor)^2 + 1)	Price Volatility Factor	ADM		9.99		Edit with ADM Price, "A00810".		
InMoon	a = In/Projected Price\ In/\ar / 2	log Mean Quantity (LnMean)	Internal		999999.99999999	Round to 8 decimals.			
Liliviean	n = Ln(Projected Price) – LnVar / 2	Projected Price	ADM		99999.9999		Edit with ADM Price, "A00810".		

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Record Code: P11

Exhibit Number: P11-1, Plan 01, 02, 03 Record Name: Acreage

Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
	0011 Wheat	0021 Cotton	0078 Sunflower
Commodity Code	0015 Canola	0041 Corn	0081 Soybeans
	0018 Rice	0051 Grain Sorghum	0091 Barley

	0018 Rice	0051 Grain Sorghum			0091 Barley		
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
	<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
Yield Draw Quantity _{Sequence} = Number	For Sequence Number 1 to 500 Yield Draw Quantity	Yield Draw Quantity	ADM		\$99.999999999	None	Edit with ADM Beta, "A01020". Use the Beta ID field from ADM Insurance Offer, "A00030" and the Beta "A01020" to obtain the applicable draws. There should be 500 draws (or sequence numbers) per Beta Id for every distinct Beta Id in the Insurance Offer ADM, "A00030".
Price Draw Quanity _{Sequence} =	For Sequence Number 1 to 500 = Price Draw Quantity	Price Draw Quantity	ADM		S99.999999999	None	Edit with ADM Beta, "A01020". Use the Beta ID field from ADM Insurance Offer, "A00030" and the Beta "A01020" to obtain the applicable draws. There should be 500 draws (or sequence numbers) per Beta Id for every distinct Beta Id in the Insurance Offer ADM
		Simulated Yield Protection Losses Quantity (SimYPLosses)	Internal		999999999999999999999999999999999999999	None	
Simulated Yield Protection Losses Quantity	$= \sum_{i=1}^{\infty} MAX(0, AY * covlvl - MAX(0, Yield_i * AdjStndDev + AdjMean))$	Approved Yield (AY)	P11	47	99999999.99	None	
		Coverage Level Percent (covlvl)	P14	33	9.9999	None	
		Yield Draw Quantity _i (Yield _i)	ADM	_	S99.99999999	None	

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Record Name: Acreage

Reinsurance Year: 2011

Version: Approved

	Record Name: Record Code:	<u>-</u>			version: Release Date:	Approved 6/30/2010	
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with I	Harvest Price Exclusion
	0011 Wheat	0021 Cotton			0078 Sunflower 0081 Soybeans		
Commodity Code	0015 Canola	0041 Corn					
	0018 Rice	0051 Grain Sorghum			0091 Barley		
	Calculations	<u>Field</u> Name	Record Number	<u>Field</u> Number	<u>Field</u> Format	<u>Field</u> Rounding	Rules
	500	Simulated Revenue Protection Losses Quantity(SimRPLosses)	Internal		9999999999999999999999	None	
Simulated Revenue	MAX(0, AY * covlvl * MAX(ProjPrice,	Approved Yield (AY)	P11	47	99999999.99	None	
Protection Losses = Quantity	MIN(2 * ProjPrice, e ^{(Price} i * VLnVar + LnMean))) -	Coverage Level Percent (covlvl)	P14	33	9.9999	None	
Quantity	(MAX(0, Yieldi * AdjStdDev + AdjMean) *	Yield Draw Quantity _i (Yield _i)	ADM		S99.999999999	None	
	MIN(2 * ProjPrice, e ^{(Price} i * VLnVar + LnMean))))	Projected Priced (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810".
Simulated Revenue Protection with Harvest Price Exclusion Losses	$= \sum MAX(0, AY * covlvl * ProjPrice - (MAX(0, Yieldi * $	Simulated Revenue Protection with Harvest Price Exclusion Losses Quantity (SimRPhpeLosses)	Internal		99999999999999999	None	
Quantity	Adjutable Adjutedity Willy 2 Troji fice,	Approved Yield (AY)	P11	47	99999999.99	None	
Quantity	e ^{(price} i * ^{vLnVar + LnMean)}))))	Coverage Level Percent (covlvl)	P14	33	9.9999	None	
Simulated Yield Protection Base Premium Rate	(Simulated Yield Protection Losses Quantity / 500) / (Approved Yield * Coverage Level Percent)	Simulated Yield Protection Base Premium Rate	Internal		999999.99999999	Round to 8 decimals.	
Protection Base Premium :	(Simulated Revenue Protection Losses / 500) / = (Approved Yield * Coverage Level Percent * Projected Price)	Simulated Revenue Protection Base Premium Rate	Internal		999999.99999999	Round to 8 decimals.	
Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate	(Simulated Revenue Protection with harvest Price = Exclusion Losses Quantity / 500) / (Approved Yield * Coverage level Percent * Projected Price)	Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate	Internal		999999.99999999	Round to 8 decimals.	
Protection Premium Add =	MAX(Simulated Revenue Protection Base Premium = Rate - Simulated Yield Protection Base Premium Rate, 0.01 * Base Premium Rate)	Preliminary Revenue Protection Premium Add on Rate	Internal		999999.99999999	Round to 8 decimals.	This is a control meant to ensure that the premium rate associated with Revenue Protection is at least 1% greater than the basic Base Premium Rate where the Price Volatility Factor is NOT EQUAL to 0.

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Record Name: Acreage

Reinsurance Year: 2011

Version: Approved

Record Code: P11

Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection wit	h Harvest Price Exclusion
	0011 Wheat	0021 Cotton			0078 Sunflower		
Commodity Code	0015 Canola	0041 Corn			0081 Soybeans		
	0018 Rice	0051 Grain Sorghum			0091 Barley		
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
	<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
Protection with Harvest _	MAX(Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate - Simulated Yield Protection Base Premium Rate, -0.5 * Base Premium Rate)	Preliminary Revenue Protection with Harvest Price Exclusion Add on Rate	Internal		999999.99999999	Round to 8 decimals.	This is a control meant to ensure that the premium rate associated with Revenue Protection with Harvest Price Exclusion will not be less than half of the Base Premium Rate where the Price Volatility Factor is NOT EQUAL to 0
ection 6: Historical Revenu	e Capping						This section is for calculation the 2010 Revenue Assurance Optional Unit Level Base Premium Rate for coverage level percents 65 thru 85 where applicable. Then it is used in conjunction with the Base Premium Rate and Revenue Add On Rates to compute capped Revenue Add On Rates. This table is set up such that the only value that will change from year to year is the Commodity Year. By doing this we are fixing a point where the premium calculation method was changed and applying an exponential capping over time. If there is NOT a corresponding row in the Historical Revenue Capping ADM, "A01110", then this calculation does not need to be performed. Furthermore, since
							coverage level percents 50, 55, 60 did not exist for Revenue Assurance (RA) historically capping does not need to be performed for those coverage level percent as well.
		Capping Yield Ratio	Internal		9.99	Round to 2 decimals.	Revenue Assurance (RA) historically capping does not need to be performed for those coverage level percent
Canning Viold Patio	Pata Viold / Capping Poforonce Viold	Capping Yield Ratio Rate Yield	Internal P15	38	9.99 99999999.99	Round to 2 decimals.	Revenue Assurance (RA) historically capping does not need to be performed for those coverage level percent as well.
Capping Yield Ratio =	Rate Yield / Capping Reference Yield			38			Revenue Assurance (RA) historically capping does not need to be performed for those coverage level percen as well.
Capping Yield Ratio =	Rate Yield / Capping Reference Yield	Rate Yield	P15	38	99999999.99	None	Revenue Assurance (RA) historically capping does not need to be performed for those coverage level percenas well. Cup at 0.50 and Cap at 1.50.

99999.99

None

Edit with ADM Historical Revenue Capping, "A01110".

Prior Capping Reference Yield

Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

03 Revenue Protection with Harvest Price Exclusion

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	
	0011 Wheat	0021 Cotton	0078 Sunflower
Commodity Code	0015 Canola	0041 Corn	0081 Soybeans
	0018 Rice	0051 Grain Sorghum	0091 Barley

	0018 Rice	0051 Grain Sorghum			0091 Barley		
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>
Capping Pate Multiplier =	Comming Wield Datio Accoming Function Value	Capping Rate Multiplier	Internal		999999.99999999	Round to 8 decimals.	
Capping Rate Multiplier =	Capping Yield Ratio ^Capping Exponent Value	Capping Exponent Value	ADM		\$99.999	None	Edit with ADM Historical Revenue Capping, "A01110".
	Prior Capping Yield Ratio ^Prior Capping Exponent	Prior Capping Rate Multiplier	Internal		999999.99999999	Round to 8 decimals.	
Multiplier	Value	Prior Capping Exponent Value	ADM		\$99.999	None	Edit with ADM Historical Revenue Capping, "A01110" Edit with ADM Historical Revenue Capping, "A01110" Edit with ADM Sub County Rate, "A01050".
	If Rate Method Code = Fixed, "F": Sub County Rate	Historical Capping Base Rate	Internal		999999.9999999	Round to 8 decimals.	
Historical Capping Pass	If Rate Method Code = Additive, "A": Sub County Rate + (Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)	Sub County Rate	ADM		9.9999	None	Edit with ADM Sub County Rate, "A01050".
Kate	If Rate Method Code = Multiplicative, "M": Sub County Rate * (Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)	Capping Reference Rate	ADM		9.9999		Edit with ADM Historical Revenue Capping, "A01110".
	Otherwise: (Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)	Capping Fixed Rate	ADM		9.9999		Edit with ADM Historical Revenue Capping, "A01110".

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code01 Yield Protection02 Revenue Protection03 Revenue Protection with Harvest Price ExclusionCommodity Code0011 Wheat0021 Cotton0078 SunflowerCommodity Code0015 Canola0041 Corn0081 Soybeans0018 Rice0051 Grain Sorghum0091 Barley

	0010 11100	Cost Crain Sorginam			oosi baney		
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
	<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	Rounding	<u>Rules</u>
	If Rate Method Code = Fixed "F": Sub County Rate	Historical Prior Capping Base Rate	Internal		999999.9999999	Round to 8 decimals.	
	If Rate Method Code = Additive, "A":						
Historical Prior Capping	Capping Reference Rate + Prior Capping Fixed Rate)	Sub County Rate	ADM		9.9999	None	Edit with ADM Sub County Rate, "A01050".
Base Rate	If Rate Method Code = Multiplicative, "M":						
	Sub County Rate * (Prior Capping Rate Multiplier * Prior Capping Reference Rate + Prior Capping Fixed Rate)	Prior Capping Reference Rate	ADM		9.9999		Edit with ADM Historical Revenue Capping, "A01110".
	Otherwise:						
	(Prior Capping Rate Multiplier * Prior Capping Reference Rate + Prior Capping Fixed Rate)	Prior Capping Fixed Rate	ADM		9.9999		Edit with ADM Historical Revenue Capping, "A01110".
	9 * MIN(.999, Historical Prior Capping Base Rate * 1.2, Historical Capping Base Rate)	Historical Basic Unit Base Rate	Internal		999999.99999999	Round to 8 decimals.	

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Price Volatility Factor

Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

O11 Wheat O015 Canola O014 Corn O015 Garola O015 Garol	Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with H	arvest Price Exclusion
O018 Rice O051 Grain Sorghum O091 Barley Calculations Field Record Field Field Field Field Format Rounding Rules [beta 0 Factor + Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Historical Basic Unit Base Rate * 2+ Beta 3 Factor * Coverage Level Percent + Beta 4 Factor * Coverage Level Percent * 2+ Beta 5 Factor * Approved Yield / Capping Reference Yield + Beta 6 Factor * Price Volatility Factor + Beta 8 Factor * Price Volatility Factor * Beta 1 Factor * Historical Basic Unit Base Rate * Approved Yield / Capping Reference Yield + Beta 1 Factor * Historical Basic Unit Base Rate * Approved Yield / Capping Reference Yield + Beta 1 Factor * Historical Basic Unit Base Rate * Price Volatility Factor + Beta 1 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 1 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 1 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 1 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 1 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 1 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 1 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 1 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 1 Factor * Coverage Level Percent * Price Volatility Factor * Beta 1 Factor * Coverage Level Percent * Price Volatility Factor * Beta 1 Factor * Coverage Level Percent * Price Volatility Factor * Beta 1 Factor * Coverage Level Percent * Price Volatility Factor * Beta 1 Factor * Coverage Level Percent * Price Volatility Factor * Beta 1 Factor * Coverage Level Percent * Price Volatility Factor * Beta 1 Factor * Coverage Level Percent * Price Volatility Factor * Beta 1 Factor * Coverage Level Percent * Price Volatility Factor * Beta 1 Factor * Coverage Level Percent * Price Volatility Factor * Beta 1 Factor * Coverage Level Percent * Price		0011 Wheat	0021 Cotton			0078 Sunflower		
Eleid Name Number Field Number Field Number Format Rounding Rules	Commodity Code	0015 Canola	0041 Corn			0081 Soybeans		
Eleta O Factor +		0018 Rice	0051 Grain Sorghum			0091 Barley		
[beta0 Factor + Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Coverage Level Percent + Beta 4 Factor * Coverage Level Percent * 2 + Beta 5 Factor * Approved Yield / Capping Reference Yield + Beta 6 Factor * (Approved Yield / Capping Reference Yield + Beta 7 Factor * Price Volatility Factor + Beta 8 Factor * Price Volatility Factor * 2 + Beta 9 Factor * Historical Basic Unit Base Rate * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 11 Factor * Historical Basic Unit Base Rate * Approved Yield / Capping Reference Yield + Beta 12 Factor * Historical Basic Unit Base Rate * Price Volatility Factor + Beta 13 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 13 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 13 Factor * Coverage Level Percent * Price Volatility Factor + Beta 13 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor + Beta 15 Factor * Coverage Level Percent * Price Volatility Factor * Coverage Level Percent * Price Volatility Factor * Coverage Level Percent * Price Volatility Factor * Coverage Level Percent * Price Volatil			<u>Field</u>			<u>Field</u>		
Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Coverage Level Percent + Beta 4 Factor * Coverage Level Percent + Beta 5 Factor * Approved Yield / Capping Reference Yield + Beta 6 Factor * Price Volatility Factor + Beta 8 Factor * Price Volatility Factor * Pri		<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
Yield) * Price Volatility Factor] * Unit Residual Factor X	rotection Base Premium :	Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Historical Basic Unit Base Rate ^2 + Beta 3 Factor * Coverage Level Percent + Beta 4 Factor * Coverage Level Percent ^2 + Beta 5 Factor * Approved Yield / Capping Reference Yield + Beta 6 Factor * (Approved Yield / Capping Reference Yield)^2 + Beta 7 Factor * Price Volatility Factor + Beta 8 Factor * Price Volatility Factor^2 + Beta 9 Factor * Historical Basic Unit Base Rate * Coverage Level Percent + Beta 10 Factor * Historical Basic Unit Base Rate * Approved Yield / Capping Reference Yield + Beta 11 Factor * Historical Basic Unit Base Rate * Price Volatility Factor + Beta 12 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 13 Factor * Coverage Level Percent * Price Volatility Factor + Beta 14 Factor * (Approved Yield / Capping Reference		Internal		99999999999999999	* calculation to 8 decimals as	

ADM

9.99

None

Edit with ADM Price, "A00810".

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion	
	0011 Wheat	0021 Cotton	0078 Sunflower	
Commodity Code	0015 Canola	0041 Corn	0081 Soybeans	
	0018 Rice	0051 Grain Sorghum	0091 Barley	
		Fi-Li	Normal Pield Pield Pield	

	0010 vice	0051 Grain Sorgnum			0091 barrey	1	
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
	Calculations	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
Protection with Harvest = Price Exclusion Base	[beta0 Factor + Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Historical Basic Unit Base Rate ^2 + Beta 3 Factor * Coverage Level Percent + Beta 4 Factor * Coverage Level Percent ^2 + Beta 5 Factor * Approved Yield / Capping Reference Yield + Beta 6 Factor * (Approved Yield / Capping Reference Yield)^2 + Beta 7 Factor * Price Volatility Factor + Beta 8 Factor * Price Volatility Factor^2 + Beta 9 Factor * Historical Basic Unit Base Rate * Coverage Level Percent + Beta 10 Factor * Historical Basic Unit Base Rate * Approved Yield / Capping Reference Yield + Beta 11 Factor * Historical Basic Unit Base Rate * Price Volatility Factor + Beta 12 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 13 Factor * Coverage Level Percent * Price Volatility Factor + Beta 14 Factor * (Approved Yield / Capping Reference Yield) * Price Volatility Factor] * Unit Residual Factor X	Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate	Internal		99999999999999999	Round each intermittent Beta * calculation to 8 decimals as it has been done historically.	
	1.1	Beta O Factor - Beta 14 Factor	ADM		S99.99999999	None	Edit with ADM Historical Revenue Capping, "A01110".
		Price Volatility Factor	ADM		9.99	None	Edit with ADM Price, "A00810".

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Reinsurance Year: 2011

	Record Name: Acreage				Version:	Approved		
		•	Version: Approved Release Date: 6/30/2010					
	Record Code:	: P11			Release Date.	0/30/2010		
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection w	ith Harvest Price Exclusion	
	0011 Wheat	0021 Cotton			0078 Sunflower			
Commodity Code	0015 Canola	0041 Corn			0081 Soybeans			
	0018 Rice	0051 Grain Sorghum			0091 Barley			
		<u>Field</u>	Record	Field	<u>Field</u>	<u>Field</u>		
	<u>Calculations</u>	<u>Name</u>	<u>Number</u>	Number	<u>Format</u>	Rounding	<u>Rules</u>	
Capped Revenue	MIN(Base Premium Rate + Preliminary Revenue Protection Add On Rate, Historical Revenue Protection Base Premium Rate * 1.2^(Commodity Year - Capping	Capped Revenue Protection Add on Rate	Internal		999999999999999999999	Round to 8 decimals.	Use the Preliminary Add On Rates for Insurance Plan Code Revenue Protection, "02" or Revenue Protection with Harvest Price Exclusion, "03" from section 5, the Base Premium Rate from section 2 to calculate the Capped Revenue add on factors.	
Protection Add on Rate		Base Premium Rate	P11	90	999999.9999999	None		
	Year)) - Base Premium Rate	Commodity Year	P14	10	CCYY	None		
		Capping Year	ADM		CCYY	None	Edit with ADM Historical Revenue Capping, "A01110".	
Capped Revenue Protection with Harvest Price Exclusion Add on	MIN(Base Premium Rate + Preliminary Revenue Protection with Harvest Price Exclusion Add On Rate, Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate * 1.2^(Commodity Year -	Capped Revenue Protection with Harvest Price Exclusion Add on Rate	Internal		99999999999999999	Round to 8 decimal	Use the Preliminary Add On Rates for Insurance Plan Code Revenue Protection, "02" or Revenue Protection with Harvest Price Exclusion, "03" from section 5, the Base Premium Rate from section 2 to calculate the Capped Revenue add on factors.	
Rate		Base Premium Rate	P11	90	999999.9999999	None		
	Capping Year)) - Base Premium Rate	Commodity Year	P14	10	CCYY	None		
		Capping Year	ADM		CCYY	None	Edit with ADM Historical Revenue Capping, "A01110".	
ection 7: Whole Farm Unit Base Premium Rate							The Whole Farm Unit Discount is only applicable to the Revenue Protection and Revenue Protection with Harvest Price Exclusion Insurance Plans, unless the Special Provisions allow Whole Farm Units for other Insurance Plans. Whole Farm Units will now mandate that producers	
							include both their spring and fall planted commoditie into the whole farm unit for commodity/plans offerin Whole Farm Units. Malting Barley Coverage is NOT applicable for Whole Farm Unit. Malting Parley Coverage is provided as a	
							Farm Unit. Malting Barley Coverage is provided as a separate Basic Unit.	

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
	0011 Wheat	0021 Cotton	0078 Sunflower
Commodity Code	0015 Canola	0041 Corn	0081 Soybeans
	0018 Rice	0051 Grain Sorghum	0091 Barley

0018 Rice	0051 Grain Sorghum			0091 Barley		
	<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
$Mean\ Quantity\ _{commodityj} = \frac{Mean\ Quantity\ _{commodityj}\ WHERE\ Revenue\ Lookup\ Rate}{_{commodityj} = Base\ Rate\ _{commodityj}}$	Mean Quantity _{commodityj}	ADM		999.99999999	None	Edit with ADM Combo Revenue Factor, "A01030". Search the Combo Revenue Factor, "A01030" for the Mean Quantity, When the Revenue Lookup Rate = Base Rate
	Revenue Lookup Rate commodityj	Internal		9.9999	None	
	Base Rate commodityj	ADM	_	9.9999	None	Edit with ADM Combo Revenue Factor, "A01030".
Standard Deviation Quantity commodityi Standard Deviation Quantity commodityi Cookup Rate commodityi = Base Rate commodityi	Standard Deviation Quantity commodityj	ADM		999.99999999	None	Edit with ADM Combo Revenue Factor, "A01030". Search the Combo Revenue Factor, "A01030" for the Standard Deviation Quantity, When the Revenue Lookup Rate = Base Rate
	Revenue Lookup Rate commodityj	Internal		9.9999	None	
	Base Rate commodityj	ADM		9.9999	None	Edit with ADM Combo Revenue Factor, "A01030".
Adjusted Mean Quantity = Approved Yield commodity * Mean Quantity commodity / 100	Adjusted Mean Quantity commodityj	Internal		999999.99999999	Round to 8 decimals.	
commodityj	Approved Yield commodityj	P11	47	99999999.99	None	
Adjusted Standard Deviation Quantity = Approved Yield commodity * Standard Deviation Quantity commodity / 100	Adjusted Standard Deviation Quantity _{commodityj}	Internal		99999999999999999	Round to 8 decimals.	
commodityj	Approved Yield commodityj	P11	47	99999999.99	None	
LnVariance commodity = In((Price Volatility Factor commodity) ^2 + 1)	Log Variancecommodityj (LnVar)	Internal		999999.99999999	Round to 8 decimals.	
	Price Volatility Factor _{commodityj}	ADM		9.99	None	Edit with ADM Price, "A00810".

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Exhibit Name: Premium Calculation

Record Name: Acreage

Exhibit Number: P11-1, Plan 01, 02, 03

Price Draw Quantity

Reinsurance Year: 2011 Version: Approved

S99.99999999

None

should be 500 Draws (or sequence numbers) per Beta Id

in the ADM Beta, "A01020" for every distinct Beta Id in

the ADM Insurance Offer, "A00030".

	Record Code:		11 Release Date: 6/30/2010						
Insurance Plan Code	01 Yield Protection	02 Revenue Protection	D2 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion						
	0011 Wheat	0021 Cotton			0078 Sunflower				
Commodity Code	0015 Canola	0041 Corn			0081 Soybeans				
	0018 Rice	0051 Grain Sorghum			0091 Barley				
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>			
	<u>Calculations</u>	<u>Name</u>	Number	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>		
LnMean commodity = In(Projected Pricecommodity) - LnVariancecommodity / 2		log Mean _{commodityj} (LnMean)	Internal		999999.99999999	Round to 8 decimals.			
LITIVIEATI commodity	_{/j} = III(Projected Price _{commodityj}) - Lifvariance _{commodityj} / 2	Projected Price _{commodityj}	ADM		99999.9999		Edit with ADM Price, "A00810".		
Yield Draw Quantity commodityj Sequence Number	y = Yield Draw Quantity _{commodity}	Yield Draw Quantity	ADM		\$99.99999999	None	ADM Insurance Offer, "A00030", and Beta, "A01020", should be used to obtain the applicable draws. There should be 500 Draws (or sequence numbers) per Beta Id in the ADM Beta, "A01020" for every distinct Beta Id in the ADM Insurance Offer, "A00030".		
Price Draw Quantity							ADM Insurance Offer, "A00030", and Beta, "A01020", should be used to obtain the applicable draws. There		

ADM

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Price Draw Quantity = Price Draw Quantity_{commodity}

commodityj Sequence Number

Record Name: Acreage
Record Code: P11

Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

	Record Code: P11			Release Date: 6/30/2010					
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection wit	th Harvest Price Exclusion		
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0051 Grain Sorghum			0078 Sunflower 0081 Soybeans 0091 Barley				
	<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> Number	<u>Field</u> <u>Format</u>	<u>Field</u> Rounding	Rules		
		Simulated Revenue Protection Losses Whole Farm (SimRPLossesWF)	Internal		999999999999999999999999999999999999999	None	Simulated Revenue Protection Losses for All Commodity/Acreage report line in the Whole Farm Unit.		
		Coverage Level Percent (covlvl)	P14	33	9.9999	None			
	500 all Commodities	Approved Yield _{commodityj} (AY)	P11	47	99999999.99	None	Approved Yield for each Commodity/Acreage report line in the Whole Farm Unit.		
$\sum_{i=1}^{\sum} MAX(0,covIvI * (\sum_{j=1}^{i} Ay_{coi})$ $Acres_{commodityj} * MAX(ProjI)$	$\sum_{i=1}^{\infty} MAX(0,covIvI * (\sum_{j=1}^{\infty} Ay_{commodityj} * Acres_{commodityj} * MAX(ProjPrice_{commodityj})$	Reported Acreage _{commodityj} (Acres)	P11	52	999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage. Reported Acreage for each Commodity/Acreage report line in the Whole Farm Unit.		
Simulated Revenue Protection Losses Whole Farm	TVI VY(O)(TTCTa commodity)i / Tajota De v commodityj	Projected Price _{commodityj} (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810". Projected Price for each Commodity/Acreage report line in the Whole Farm Unit.		
	AdjMean _{commodityj})) * MIN(2 * ProjPrice _{commodiyj} , e ^{(pricecommodityji *}	Price Draw Quanity _{commodityj} i (Price)	ADM		S99.999999999	None	Price Draw Quantity for each Commodity /Acreage report line in the Whole Farm Unit.		
	vLnVarcommodityj + LnMeancommodityj)) *	Log Variance _{commodityj} (LnVar)	Internal		999999.99999999	None	Log Variance for each Commodity/Acreage report line in the Whole Farm Unit.		
	(Acres _{commodityj}))	log Mean _{commodityj} (LnMean)	Internal		999999.99999999	None	Log Mean for each Commodity/Acreage report line in the Whole Farm Unit.		
		Yield Draw Quantity _{commodityj} i (Yield)	ADM		S99.999999999	None	Yield Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.		
		Adjusted Standard Deviation Quantity _{commodityj} (AdjStnDev)	Internal		999999999999999999999999999999999999999	None	Adjusted Standard Deviation Quantity for each Commodity/Acreage report line in the Whole Farm Unit.		
		Adjusted Mean Quantity _{commodityj} (AdjMean)	Internal		999999.99999999	None	Adjusted Mean Quantity for each Commodity/Acreage report line in the Whole Farm Unit.		

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Record Name: Acreage
Record Code: P11

Reinsurance Year: 2011

Version: Approved
Release Date: 6/30/2010

	Record Code: P11			Release Date: 6/30/2010						
Incurrence Dien Code	01 Viold Protection	02 Payanya Protection		03 Devenue Dretestian with Harvest Dries Evolucies						
Insurance Plan Code	01 Yield Protection		2 Revenue Protection 03 Revenue Protection with Harvest Price Exclusion							
	0011 Wheat	0021 Cotton 0078 Sunflower								
<u>Commodity Code</u>	0015 Canola	0041 Corn 0081 Soybeans								
	0018 Rice	0051 Grain Sorghum 0091 Barley								
	<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>			
		Simulated Revenue Protection Harvest Price Excluded Losses Whole Farm (SimRPhpeLossesWF)	Internal		9999999999999999	None	Simulated Revenue Protection Harvest Price Excluded Losses for All Commodity/Acreage report lines in the Whole Farm Unit.			
		Coverage Level Percent (covlvl)	P14	33	9.9999	None				
	500 all commodities	Approved Yield _{commodityj} (AY)	P11	47	99999999.99	None	Approved Yield for each Commodity/Acreage report line in the Whole Farm Unit.			
Protection Harvest Price	$\sum_{i=1}^{\infty} MAX (0, covlvl * \sum_{j=1}^{\infty} (AY_{commodityj} * \\ ProjPrice_{commodityj} * Acres_{commodityj}) - MAX(0, \\ = (Yield_{commodityji} * AdjStdDev_{commodityj} + $	Reported Acreage _{commodityj} (Acres)	P11	52	999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage. Reported Acreage for each Commodity/Acreage report line in the Whole Farm Unit.			
Excluded Losses Whole Farm	AdjMean _{commodityj})) * MIN(2 * ProjPrice _{commodityj} , e ^{(pricecommodityji *} vLnVarcommodityj = LnMeancommodityj)) *	Projected Price _{commodityj} (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810". Projected Price for each Commodity/Acreage report line in the Whole Farm Unit.			
	(Acres _{commodityj}))	Yield Draw Quantity _{commodityj} i (Yield)	ADM		S99.999999999	None	Yield Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.			
		Adjusted Standard Deviation Quantity _{commodityj} (AdjStnDev)	Internal		999999999999999999999999999999999999999	None	Adjusted Standard Deviation Quantity for each Commodity/Acreage report line in the Whole Farm Unit.			
		Adjusted Mean Quantity _{commodityj} (AdjMean)	Internal		999999.999999999	None	Adjusted Mean Quantity for each Commodity/Acreage report line in the Whole Farm Unit.			
		Price Draw Quanity _{commodityj} i (Price)	ADM		\$99.99999999	None	Price Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.			
		Log Variance _{commodityj} (LnVar)	Internal		999999.99999999	None	Log Variance for each Commodity/Acreage report line in the Whole Farm Unit.			
		log Mean _{commodityj} (LnMean)	Internal		999999.99999999	None	Log Mean for each Commodity/Acreage report line in the Whole Farm Unit.			

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
	0011 Wheat	0021 Cotton	0078 Sunflower
Commodity Code	0015 Canola	0041 Corn	0081 Soybeans
	0018 Rice	0051 Grain Sorghum	0091 Barley
		Field	Decord Field Field Field

0010 NICC	0031 Grain Sorgham			0031 Barrey		
	<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
Revenue Protection Whole Farm Rate $= \frac{\frac{SimRPLossesWF}{500}}{\text{covlvl} * \sum_{j = Acres_{commodityj}} * ProjPrice_{commodityj}} *$	Revenue Protection Whole Farm Rate	Internal		999999999999999999999999999999999999999	None	
$\frac{SimRPhpeLossesWF}{500}$ Revenue Protection with ${}$ Harvest Price Exclusion = $\frac{all \ commodities}{}$ Whole Farm Rate $\frac{covlvl * \sum (AY_{commodityj} * ProjPrice_{commodityj} *}{}$ $\frac{j}{} = Acres_{commodityj})$	Revenue Protection with Harvest Price Exclusion Whole Farm Rate	Internal		9999999999999999	None	
When Insurance Plan Code equals Revenue Protection, "02": Whole Farm Base Premium Rate = Revenue Protection Whole Farm Rate	Whole Farm Base Premium Rate	Internal		99999999999999999	None	
When Insurance Plan Code equals Revenue Protection with Harvest Price Exclusion, "03":						
Whole Farm Base Premium Rate Revenue Protection with Harvest Price Exclusion Whole Farm Rate	Whole Farm Base Premium Rate	Internal		999999999999999999999999999999999999999	None	

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Record Name: Acreage

Reinsurance Year: 2011

Version: Approved

	Record Name: Acreage Record Code: P11				Version: Release Date:		
		·				0,00,2020	
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with I	Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola	0021 Cotton 0041 Corn			0078 Sunflower 0081 Soybeans		
commodity code	0018 Rice	0051 Grain Sorghum			0091 Barley		
	<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>
Section 8: Premium Rate							The Premium Rate for ALL Unit Structures should be capped at .999 in the event various adjustments to the Base Premium Rate would cause it to exceed 1.0.
When Unit Structure Code	equals Whole Farm Unit, "WU":						
Premium Rate	MIN(.999, Whole Farm Base Premium Rate * = Multiplicative Optional Rate Adjustment Factor + Additive Optional Rate Adjustment Factor	Premium Rate	Internal		999999999999999999999999999999999999999	Round to 8 decimals.	For situations where the option factors vary by Commodity, a reported Acreage weighted average of the Option Factors should be used to determine the Multiplicative and Additive Optional Rate adjustments to be used in the computation of the Premium Rate for Whole Farm Unit.
When Unit Structure Code Premium Rate	DOES NOT EQUAL Whole Farm Unit, "WU": MIN(.999, Base Premium Rate * Unit Discount Factor * Multiplicative Optional Rate Adjustment Factor+ Additive Optional Rate Factor + Capped Revenue Add On Factor)	Premium Rate	Internal		999999999999999999999	Round to 8 decimals.	
Section 9: Total Premium	Amount, Subsidy Amount, and Producer Premium Amour	nt					
		Preliminary Total Premium	Internal		999999999	Round to whole number.	
Preliminary Total Premium	Premium Liability Amount * Premium Rate * Experience Factor * Premium Surcharge Factor	Experience Factor	P11	52	9.999	None	Experience Factor is only applicable for Insurance Plan Code Yield Protection, "01".
		Premium Surcharge Factor					Use when the Approved Yield Had a Cup or Surcharge applied.
TullBusins	_ Preliminary Total Premium * Multiple Commodity	Total Premium Amount	P11	88	999999999	Round to whole number.	
Total Premium Amount	t = Adjustment Factor	Multiple Commodity Adjustment Factor	ICE		9999.999	None	Edit with ICE Multiple Cropping, "D00063". Used when there is a first Commodity Loss.
Subsidy Amount	= Total Premium Amount * Subsidy Percent	Subsidy Amount	P11	86	999999999	Round to whole number.	Edit with ADM Cubaidu Daves at IIA 20070II
Producer Premium Amount	= Total Premium Amount - Subsidy Amount	Subsidy Percent Producer Premium Amount	ADM P11	89	9.999	None Round to whole number.	Edit with ADM Subsidy Percent, "A00070".

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Exhibit Name: Premium Calculation Exhibit Number: P11-1, Plan 01, 02, 03 Reinsurance Year: 2011 Record Name: Acreage Version: Approved Record Code: P11 **Release Date:** 6/30/2010 03 Revenue Protection with Harvest Price Exclusion **Insurance Plan Code** 01 Yield Protection 02 Revenue Protection 0011 Wheat 0021 Cotton 0078 Sunflower **Commodity Code** 0015 Canola 0041 Corn 0081 Soybeans 0018 Rice 0051 Grain Sorghum 0091 Barley Record Field Field Field Field <u>Number</u> **Calculations Name** Number **Format** Rounding Rules If either the Malting Barley Option A or Malting Barley option B is chosen, a new record(s) will need to be prepared for this endorsement. These record should meet the following criteria: 1) The acreage records for the MA or MB records should Section 10: Malting Barley Options MA & MB be less than or equal to the acreage of the base offer 2) The Base Offer will not have the MA/MB option returned in the option field 3) The Acreage records with the MA or MB option will have the MA or MB option indicated in the option Field. **Malting Barley Option A Requirements:** To qualify for this option, the producer must: 1) Provide acceptable Malting Barley sales records for at least the 4 most recent Commodity Years and the number of acres planted to malting varieties. 2) If produced under a contract or price agreement, a

> copy of the current contract or price agreement must be provided on or before the acreage reporting date if the additional value price from the contract/price agreement is to be used for determining liability.

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Record Name: Acreage

Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

	Record Code: P11				Release Date		
						•	
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with H	larvest Price Exclusion
	0011 Wheat	0021 Cotton			0078 Sunflower		
Commodity Code	0015 Canola	0041 Corn			0081 Soybeans		
	0018 Rice	0051 Grain Sorghum			0091 Barley		
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>	
	<u>Calculations</u>	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>
							Malting Barley Option B Requirements:
							To qualify for this option, the producer must:
							1) Have planted Malting Barley for at least one of the
							three Commodity Years directly preceding the previous
							Commodity Year
							2) Sold at least 75% of the contracted amount for the
							Commodity Year such contract was applicable
							3) Provide a copy of the prior contract and acceptable records of sales.
	Approved Yield calculated in accordance with the Basic	I	1	ı			records of sales.
	Provisions						According to the Malting Barley Price and Quality
	11001310113						Endorsement, the Approved Yield can be based on either
Approved Yield	= OR	Approved Yield	P11	48	999999999.99		the procedures established in the Basic Provisions, or by
Approved Held	- 511	Approved Held	'	70	33333333.33		averaging the yields required to meet the qualifications
	Σ(Number of Bushels / Reported Acreage) / Σ number						for Option A.
	of years						
	,					If Unit of Measure equals	
						Pounds "LBS", then round to	
						whole number.	
		Premium Guarantee Per Acre	Internal		999999999.99	If Unit of Measure equals	
Premium Guarantee Per		Amount	IIILEITIAI		999999999.99	Tons "TONS", then round to 2	
Acre Amount	= Approved Yield * Coverage Level Percent					decimals.	
						Otherwise, round to 1	
						decimal.	
		Approved Yield	P11	47	99999999.99	None	
		Coverage Level Percent	P14	33	9.9999	None	

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Exhibit Name: Premium Calculation

Exhibit Number: P11-1, Plan 01, 02, 03

Record Name: Acreage

Record Code: P11

Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
	0011 Wheat	0021 Cotton	0078 Sunflower
Commodity Code	0015 Canola	0041 Corn	0081 Soybeans
	0018 Rice	0051 Grain Sorghum	0091 Barley

0018 Rice	0051 Grain Sorghum 0091 Barley						
<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>	
Price Election Amount = Additional Value Price	Price Election Amount	Internal		9999.9999	None	Price Election Amount will be set equal to the Additional Value Price. The Additional Value price is the difference between the contract price and regular Barley's Projected Price or the additional value price provided in the ADM if the contract price is not used. 1) The Contract Price: a) The sale price per bushel established in the contract or price agreement less the projected price for Barley. b) The amount per bushel (not including discounts or incentives) above the feed barley price that is determined at a later date, provided the method of determining the price is specified in the contract or price agreement. c) If the contract or price agreement has a variable price option, the price OR the method of determining a price that will be treated as the sale price. 2) The additional Value price indicated in the actuarial documents: a) if there is no malting barley contract. b) The contract or price agreement was not provided by the acreage reporting date. 3) The additional Value price: a) For Option A WILL NOT EXCEED \$1.25. b) For Option B WILL NOT EXCEED \$2.00.	

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Exhibit Name: Premium Calculation

Exhibit Number: P11-1, Plan 01, 02, 03

Record Name: Acreage

Record Code: P11

Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with Harvest Price Exclusion		
	0011 Wheat	0021 Cotton			0078 Sunflower			
Commodity Code	0015 Canola	0041 Corn			0081 Soybeans			
	0018 Rice	0051 Grain Sorghum			0091 Barley			
		<u>Field</u>	Record	<u>Field</u>	<u>Field</u>	<u>Field</u>		
	Calculations	<u>Name</u>	<u>Number</u>	<u>Number</u>	<u>Format</u>	<u>Rounding</u>	<u>Rules</u>	
Reported Acreage (Record 2)	= MIN(Total Reported Acreage, Malting Barley Contract 1 Bushels / Approved Yield) MIN(Total Reported Acreage - Reported Acreage for = Record 1, Malting Barley Contract 2 Bushels / Approved Yield) MIN(Total Reported Acreage - x-1 = \sum_{i=1}^{x-1} \text{Malting Barley Contract I,} malting Barley Contract X)	Reported Acreage	Internal			None	There may need to be multiple record is there are multiple contracts and/or there are more acres insured to yield more bushels than the contract(s) call for. Acreage in excess of contracted acreage will be insured at the additional value price on the actuarial documents. If there is not enough reported acres to support all of the contracts, Insurance will be limited to what the total reported acreage will support.	
	= Approved Yield * Coverage Level Percent	Premium Guarantee Per Acre Amount	Internal		999999999.99	If Unit of Measure equals Pounds "LBS", then round to whole number. If Unit of Measure equals Tons "TONS", then round to 2 decimals. Otherwise, round to 1 decimals.	Determine the Premium Guarantee Per Acre Amount and the Guarantee Per Acre Amount for each record.	
If Late Planting applies:								
	Premium Guarantee Per Acre Amount * Guarantee Adjustment Factor	Guarantee Per Acre Amount	Internal		999999999.99	If Unit of Measure equals Pounds "LBS", then round to whole number. If Unit of Measure equals Tons "TONS", then round to 2 decimals. Otherwise, round to 1 decimals.	Prevented Planting does not apply to Malting Barley Option A or Malting Barley Option B records.	

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Record Name: Acreage
Record Code: P11

Reinsurance Year: 2011 Version: Approved

Release Date: 6/30/2010

Record Code: P11			Release Date: 6/30/2010					
Insurance Plan Code	01 Yield Protection	02 Revenue Protection				03 Revenue Protection with H	Harvest Price Exclusion	
Commodity Code		0021 Cotton 0041 Corn 0051 Grain Sorghum			0078 Sunflower 0081 Soybeans 0091 Barley			
	Calculations	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>	
Premium Total Guarantee Amount	Premium Guarantee Per Acre Amount * Price Election Amount * Reported Acreage	Premium Total Guarantee Amount	Internal		99999999.99	Round to 2 decimals.		
Total Guarantee Amount =	Reported Acreage	Total Guarantee Amount	P11	96	99999999.99	Round to 2 decimals.		
Premium Liability Amount =	Premium Total Guarantee Amount * Insured Share Percent	Premium Liability Amount	Internal		999999999	Round to whole number.		
Liability Amount =	Total Guarantee Amount * Insured Share Percent	Liability Amount	P11	87	9999999999	Round to whole number.		
Premium Rate =	MIN(.999, Base Premium Rate * Unit Discount Factor * = Multiplicative Optional Rate Adjustment Factor+ Additive Optional Rate Factor)	Premium Rate Multiplicative Optional Rate	Internal		999999999999999999999999999999999999999	Round to 8 decimals.	To Determine the Premium Rate for the Malting Barley Option Records: 1) Use the Rate Yield as determined under normal procedures. 2) Process the Rate Yield through section 2 of these procedures as if it was a normal Yield Protection Plan of Insurance using the rating components for the regular Barley offer. 3) Find the Basic Unit Discount Factor to be applied later from section 3 of these procedures as if it was a normal Yield Protection Plan of Insurance 4) Find the applicable Malting Barley Option Factor to be applied later from section 4. This will be the only option factor applied to a Malting Barley record. 5) Sections 5, 6, 7 are not applicable for MA/MB records.	
		Adjustment Factor	Internal		999999.9999			
		Additive Optional Rate Adjustment Factor	Internal		999999.9999			

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Record Name: Acreage Record Code: P11 Reinsurance Year: 2011

Version: Approved Release Date: 6/30/2010

Insurance Plan Code01 Yield Protection02 Revenue Protection03 Revenue Protection with Harvest Price ExclusionCommodity Code0011 Wheat0021 Cotton0078 SunflowerCommodity Code0015 Canola0041 Corn0081 Soybeans0018 Rice0051 Grain Sorghum0091 Barley

<u>Calculations</u>	<u>Field</u> <u>Name</u>	Record Number	<u>Field</u> <u>Number</u>	<u>Field</u> <u>Format</u>	<u>Field</u> <u>Rounding</u>	<u>Rules</u>
Preliminary Total Premium Liability Amount * Premium Rate * Premium Experience Factor * Premium Surcharge Factor	Preliminary Total Premium	Internal		999999999	Round to whole number.	
	Experience Factor	P11	52	9.999	None	Experience Factor is only applicable for Insurance Plan Code Yield Protection, "01".
	Premium Surcharge Factor					
Total Premium Amount = Preliminary Total Premium * Multiple Commodity Adjustment Factor	Total Premium Amount	P11	88	999999999	Round to whole number.	
	Multiple Commodity Adjustment Factor	ICE		9999.999	None	Edit with ICE Multiple Cropping, "D00063".
Subsidy Amount = Total Premium Amount * Subsidy Percent	Subsidy Amount	P11	86	999999999	Round to whole number.	
	Subsidy Percent	ADM		9.999	None	Edit with ADM Subsidy Percent, "A00070".
Producer Premium	Producer Premium Amount	P11	89	999999999	Round to whole number.	

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